www.comtechsystems.com

Model CS67200
20 Mb/s Digital Troposcatter Modem

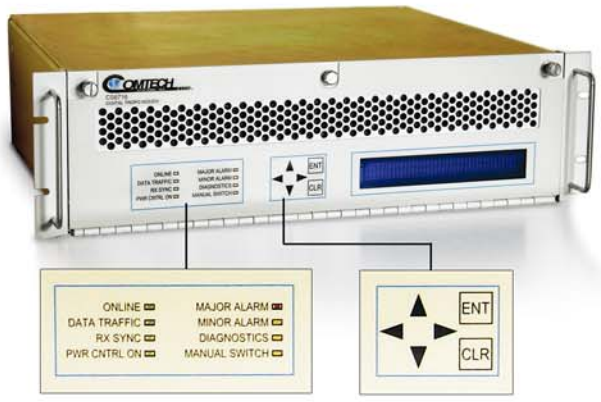
The CS67200 is Comtech Systems, state-of-the-art 20 Mb/s digital troposcatter modem. The modem's advanced features include Adaptive Link Power Control (ALPC), Forward Error Correction (FEC) with embedded Turbo Product Coding (TPC) and a monitor and control port. The front panel has a keypad to set up the modem and an alphanumeric display to indicate the status of the modem and the link performance.

Improvements from previous generation modems include a more compact design, lighter weight and 70% less power consumption. These changes ensure better performance, easier maintenance, fewer spare parts, and more robust and reliable operation. The standard CS67200 configuration includes two complete modems in one chassis. This gives the CS67200 a redundant configuration with automatic monitoring and switchover. The modem design provides the ability to handle excessive multi-path and signal dispersion using adaptive equalization, advanced TPC coding, and diversity techniques.

The CS67200 performance exceeds any modem currently on the market. The versatility of the modem allows its use at a fixed site or in transportable terminals.

Key Features

- Voice, data, and video ready
- User programmable data rates up to 20 Mb/s with or without FEC
- Data Interface: RS-530 and High-Speed Serial Interface (HSSI)
- Fully redundant design (operating modem and standby modem in one chassis) with manual or automatic switchover and fault monitoring
- Mitigates against multi-path dispersion
- Microprocessor-controlled, on-line, built-in test (BIT) capability for card level fault isolation.
- Front panel display shows the received signal level, bit error rate (BER), modem setup, and alarms
- Terminal interface for remote control and monitoring
- Integral Adaptive Link Power Control
- User selectable enhanced Turbo Product Coding (TPC) for improved performance



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COMTECH SYSTEMS, INC.
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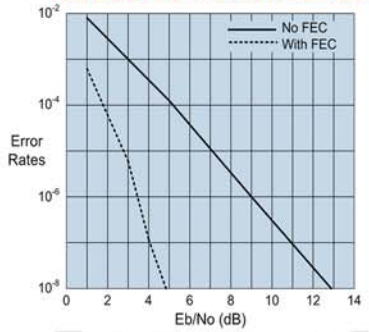
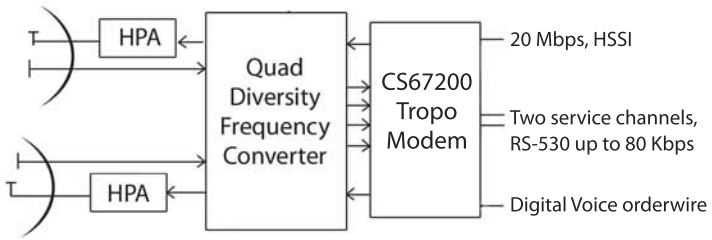
User Interfaces	
Data channel (maximum user data rates)	20 Mb/s with FEC, 22 Mb/s uncoded
Programmable data channel interface	RS-530 or High-Speed Serial Interface (HSSI), rate selectable
Service channels	Two each, up to 80 kb/s total
Service channels interface	RS-530
Integrated BER tester	32 kb/s (when enabled)
Monitor and Control	
Monitor and control port	RS-232
Front panel	Operator control and status capability
Redundancy control	Automatic and manual modes
IF Interface	
IF interface	70 MHz, 50 ohm
Transmit power out (TX1 and TX2)	0 dBm ±1 dB (without power control)
Modulation	QPSK
Receive IF bandwidth	7 MHz (data rates up to 8 Mb/s), 12 MHz (data rates over 8 Mb/s)
Receive dynamic range	+10 to -60 dBm
Forward Error Correction	
Turbo Product Code	User selectable code rates: 0.95, 7/8, 3/4, 5/8, 1/2
Adaptive Link Power Control (ALPC)	
Attenuation range	0 to 40 dB in 1 dB steps
Control modes	Automatic based on received signal level
Troposcatter Performance	
Multi path adaptive channel equalization	Dispersion up to 3.0σ/T
Maintains bit count integrity in severe fades	Maintains time tracking up to 10 seconds
Diversity combining	Dual and quad diversity, digitally adapted maximal-ratio combining
General	
Major alarm indication	LED and alpha numeric front panel display, form 'C' contacts
Station clock	10 MHz external
Power	48 VDC, 200 Watts maximum
Size	
Height	5.25 inches (13.3 cm) (3 RU)
Width	19 inches (48.2 cm) rack mount
Depth	17 inches (43.2 cm) including front carrying handles
Weight	25 pounds (11.4 kg)

Measured Performance



Typical System Application



Assured, Reliable, Innovative

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